

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: MONOMONAC, LAKE	Lake Area (ha): 287.78
Town: RINDGE	Maximum depth (m): 7.8
County: Cheshire	Mean depth (m): 2.8
River Basin: Connecticut	Volume (m ³): 8093500
Latitude: 42°43'15" N	Relative depth: 0.4
Longitude: 71°59'30" W	Shore configuration: 2.86
Elevation (ft): 1044	Areal water load (m/yr): 10.13
Shore length (m): 17200	Flushing rate (yr ⁻¹): 3.60
Watershed area (ha): 5037.7	P retention coeff.: 0.55
% watershed ponded: 1.2	Lake type: artificial

BIOLOGICAL:

12 February 1992

30 August 1991

DOM. PHYTOPLANKTON (% TOTAL)	#1	ASTERIONELLA 95%	CHRYOSOPHAERELLA 20%
	#2		PERIDINIUM 20%
	#3		STAUSTRUM 20%
PHYTOPLANKTON ABUNDANCE (cells/mL)			430
CHLOROPHYLL-A (µg/L)			5.83
DOM. ZOOPLANKTON (% TOTAL)	#1	SYNCHAETA 27%	KERATELLA 32%
	#2	NAUPLIUS LARVAE 27%	KELICOTTIA 15%
	#3		NAUPLIUS LARVAE 15%
ROTIFERS/LITER		22	91
MICROCRUSTACEA/LITER		19	57
ZOOPLANKTON ABUNDANCE (#/L)		44	148
VASCULAR PLANT ABUNDANCE			Common/Abun
SECCHI DISK TRANSPARENCY (m)			2.7
BOTTOM DISSOLVED OXYGEN (mg/L)		10.6	1.3
BACTERIA (fecal col., #/100 ml) #1			
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

weakly stratified

Depth of thermocline (m): None
Hypolimnion volume (m³) : None
Anoxic volume (m³) : None

CHEMICAL:

Lake: MONOMONAC, LAKE

Town: RINDGE

	12 February 1992		30 August 1991		
DEPTH (m)	2.0	4.0	2.5		5.5
pH (units)	5.8	5.4	6.2		5.6
A.N.C. (Alkalinity)	1.7	1.7	1.5		1.5
NITRATE NITROGEN	0.06	0.04	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN					
TOTAL PHOSPHORUS	0.008	0.008	0.014		0.013
CONDUCTIVITY (μ mhos/cm)	58.8	59.1	56.4		54.7
APPARENT COLOR (cpu)	48	46	45		70
MAGNESIUM			0.50		
CALCIUM			1.9		
SODIUM			6.6		
POTASSIUM			0.54		
CHLORIDE	10	11	10		9
SULFATE	6	6	4		4
TN : TP					
CALCITE SATURATION INDEX			4.6		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1991

D.O. S.D. PLANT CHL TOTAL CLASS

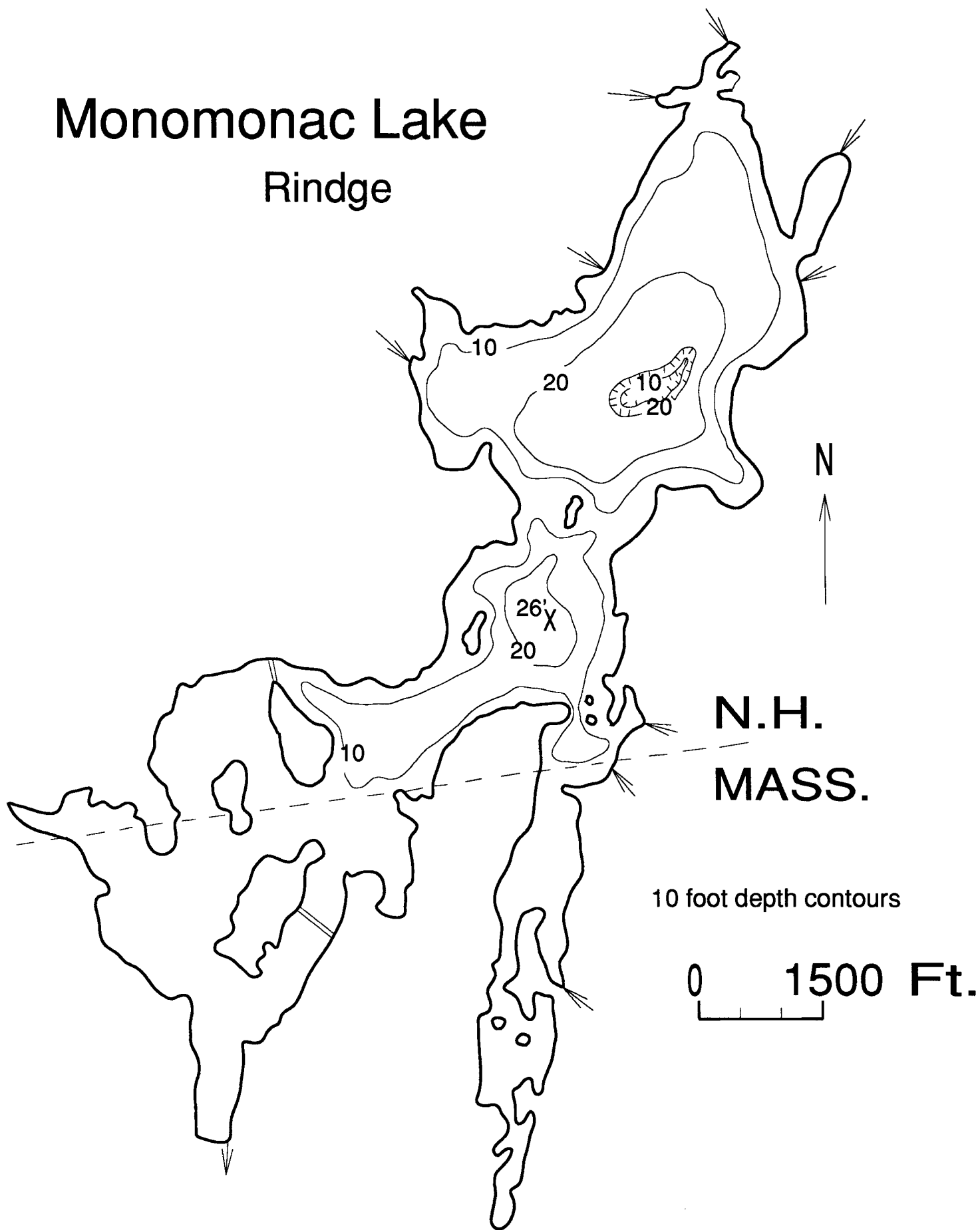
**	3	4	1	8	Meso.
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COMMENTS:

1. Also spelled Monomonoc.
2. Access is a boat ramp at a marina off Rt. 202.
3. This lake was previously surveyed in 1976. Only one station was sampled in 1991 versus two stations in 1976. The 1991 station is listed as STN A, although its location was a little south of the 1976 Stn A.
4. There was no change in trophic classification and little change in water quality between the two sampling dates.
5. The water color was a dark tea color.
6. Cryptomonads (55%) was the dominant class of wholewater plankton, and was comprised of equal numbers of Chroomonas and Cryptomonas.

Monomonac Lake

Rindge



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TOWN: RINDGE
WEATHER: SUNNY & HOT

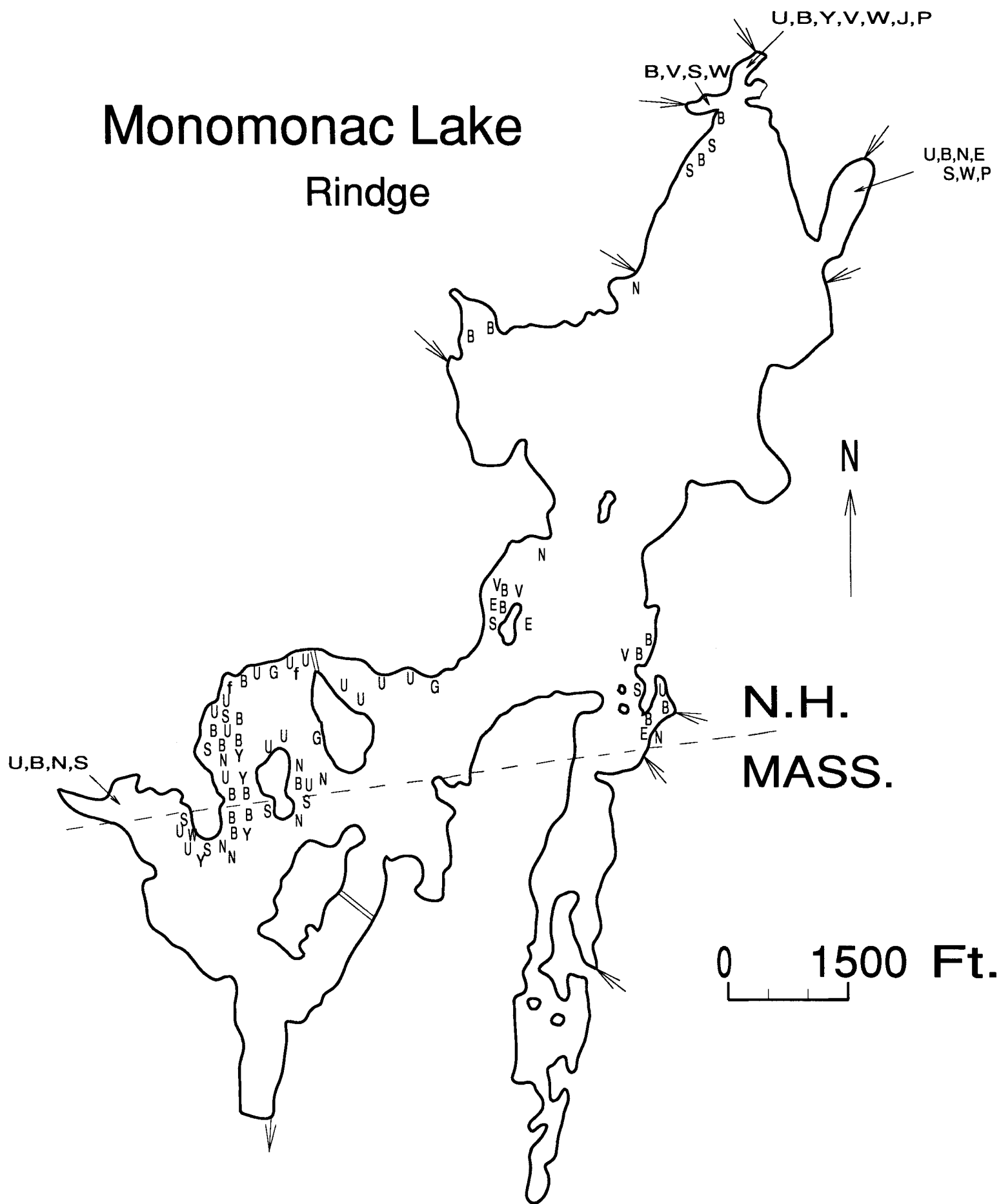
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COMMENTS :

***Dissolved oxygen values are in mg/L**

Monomonac Lake

Rindge



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